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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,509	04/05/2001	Karin Lehmann-Bruinsma	AREN-0207	7872

7590 10/10/2002

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EXAMINER

LI, RUIXIANG

ART UNIT	PAPER NUMBER
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1646

DATE MAILED: 10/10/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/826,509

Applicant(s)

LEHMANN-BRUIINSMA ET AL.

Examiner

Ruixiang Li

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 101-177 is/are pending in the application.
- 4a) Of the above claim(s) 106-177 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 101-105 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 101-177 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on April 5, 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **I. Status of Application, Amendments, and/or Claims**

The amendment filed in Paper No. 8 on August 22, 2002 has been entered in full. Claim 103 has been amended. Claims 101-177 are pending. Claims 101-105 are under consideration.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

### **II. Objection to Disclosure**

The disclosure is objected to because of the way it refers to 09/170,496. The statement fails to specify whether the instant application is a CON, CIP, or DIV of 09/170,496.

### **III. Priority**

Based on applicants' priority statement and an inspection of the parent applications, the Examiner has concluded that the subject matter defined in Claims 101-105 has an effective filing date of April 7, 2000. The subject matter defined in this application is not supported by application 09/170,496, filed on October 13, 1998.

Should applicants disagree with the examiner's factual determination above, it is incumbent upon the applicant to provide specific page number(s) of the parent application, which specifically support the claimed subject matter defined in the instant application for each pending claim.

#### **IV. Withdrawn Objections and/or Rejections**

The objection to the Disclosure, as set forth at page 3 of the previous Office Action (Paper No. 6, March 22, 2002) has been withdrawn in view of applicants' amendment to the specification.

The rejection of Claim 103 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, as set forth at page 3 of the previous Office Action (Paper No. 6, March 22, 2002), has been withdrawn in view of applicants' claim amendment.

The rejection of Claims 101-104 under 35 U.S.C. 102 (e) as set forth at page 5 of the previous Office Action (Paper No. 6, March 22, 2002) has been withdrawn, in view of the "Declaration of Chen W. Liaw".

#### **V. Claim Rejections Under 35 U. S. C. § 102 (b)**

The rejection of Claims 101-104 under 35 U.S.C. 102 (b) as set forth at page 4 of the previous Office Action (Paper No. 6, March 22, 2002) remains. Applicants argue that Herrick-Davis et al. do not teach or suggest the use of the constitutively active receptor to determine the activity of the compound. This has been fully considered but is not deemed to be persuasive because Herrick-Davis et al. teach that S312K receptors mimic the active conformation of native 5-HT<sub>2c</sub> receptors and thus provide a good model system for evaluating drugs for inverse agonist activity and a new system for screening 5-HT<sub>2c</sub> agonist activity (See, e.g., Abstract).

#### **VI. Claim Rejections Under 35 U. S. C. § 103 (a)**

The rejection of Claims 105 under 35 U.S.C. 103 (a) as set forth at pages 5-6 of the previous Office Action (Paper No. 6, March 22, 2002) remains. In view of the

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"Declaration of Chen W. Liaw", the use of a parent application in the 103 (a) rejection has been removed. However, the claim still remains rejected for the reasons below.

Claim 105 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick-Davis et al. in view of Kohen et al. (*IDS*, AY; *J. Neurochem.* 66:47-56, 1996).

Herrick-Davis et al. teach a method for identifying agonists, antagonists, partial agonists, inverse agonists using non-endogenous, constitutively activated forms of human 5-HT<sub>2a</sub>/5-HT<sub>2c</sub> serotonin receptors, as applied to claims 101-104. Herrick-Davis et al. fail to teach the use of non-endogenous, constitutively activated forms of human 5-HT<sub>6</sub> serotonin receptors.

Kohen et al. teach the nucleotide and amino acid sequences of a human 5-HT<sub>6</sub> serotonin receptor. The amino acid sequence taught by Kohen et al. has only a single amino acid difference with SEQ ID NO: 449.

Therefore, it would have been obvious for one skilled in the art to make the non-endogenous, constitutively activated forms of human 5-HT<sub>6</sub> serotonin receptor from the cDNA sequence taught by Kohen et al. using the approach taught by Herrick-Davis et al. and to include such mutants in the method of Herrick-Davis et al. One would have been motivated to do so because serotonin receptors are an important class of G-protein coupled receptors, have an important biological activity and are of potential interest to psychopharmacology as taught by Kohen et al. (page 47).

## **VII. Conclusion**

No claims are allowed.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruixiang Li whose telephone number is (703) 306-0282. The examiner can normally be reached on Monday-Friday, 8:30 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number for this Group is (703) 305-3014 or (703) 308-4242.

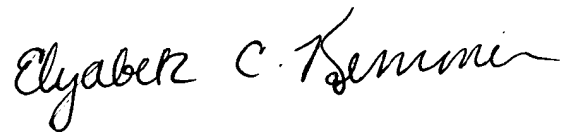
Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [yvonne.eyler@uspto.gov].

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All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Ruixiang Li  
Examiner  
September 30, 2002

A handwritten signature in cursive script that reads "Elizabeth C. Kemmerer".

ELIZABETH KEMMERER  
PRIMARY EXAMINER